Enhancing Transparency in Tax Administration in Madagascar and Tanzania

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Abstract

The following is the final report for EAGER's research done in Madagascar and Tanzania on tax administration transparency. The study sets out to show stakeholders and policy makers that:

- Evasion of many major taxes can be estimated systematically on the basis of economic parameters, allowing an aggregate estimate of the proportion of potential government revenue that is foregone through evasion;
- The margin of error of the estimation is narrow enough to say whether evasion of a particular tax is going up or down over time;
- The taxpaying public is conscious of the phenomenon of evasion, and its acceptance of responsibility for helping to finance government expenditure is affected negatively by a perception that individuals and groups with political and/or financial influence engage in massive evasion of taxes to which they are liable; and
- Tax officials are likewise conscious of the phenomenon, and their perceptions of evasion rates are consistent with estimates based on economic analysis. Moreover, their diligence in collecting taxes due is affected negatively by perceptions that (i) some of their peers and superiors accept bribes for collecting less than the full amounts due, and (ii) politicians use their influence to protect major evaders, including themselves.

The research confirms that while many stakeholders acknowledge tax evasion as a significant factor in macroeconomic weakness and deficit funding of social services, the responsible officials are reticent to estimate and publicize the extent of evasion and expose the most prominent evaders.

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A. Background of the EAGER study

The present paper is the final report of a study initiated in 1996 within the framework of the EAGER project's PSGE component. The germ of the topic arose in discussions between the author and a number of persons, both nationals of the two African countries and representatives of USAID and other donor agencies, who were consulted in Antananarivo and Dar es Salaam in November 1995. Those visits took place in the context of a multi-country trip by the author as "chief of party" of EAGER/PSGE. The tour was designed to gather suggestions for topics on the basis of which researchers at HIID and eight other institutions in a consortium led by it would prepare proposals for studies to be approved by the project coordinating team, USAID country missions and USAID/Washington's Africa Bureau.

Fiscal performance in Madagascar and Tanzania. In both countries, an issue given priority by several discussion partners was how to strengthen macroeconomic stability by reducing national budget deficits through improved performance of the tax system. Apart from the issue of macroeconomic stability, discussion partners in each country also noted that weak revenue performance was undermining the government's ability to fund social services, notably public health and education.

Table 1 presents selected aggregate parameters from a primary World Bank source, comparing the two countries with averages for Sub-Saharan Africa (SSA) excluding South Africa. Row 1, the budget balance including grants, shows both countries running deficits even after external grants are taken into account. Such conduct is the principal motor behind rapid inflation. Madagascar's deficit was close to the regional average, both during the eight years 1990-97 and at the end of that period, when performance had substantially improved.

Tanzania shows a much smaller deficit throughout the period, although (for other reasons) its 8-year inflation performance (row 2) was considerably worse. After two years of low inflation (4.5% and 6.2%), Madagascar's CPI increase jumped to 14.4% in 1999, but for 2000 is provisionally estimated again in the single digits, at 8.5%. Tanzania was estimated at 8% for 1999, while the 12-monthly rate through June 2000 was only 5.9%.

Madagascar's revenue/GDP ratio of 9.5/9.6% (row 3) was just over half the SSA average throughout the period, and Tanzania's was not much higher, representing 71% of the SSA figure over the eight years and even less (61% of it) in 1997.

As regards social expenditure, per capita public expenditure on education is known for too few SSA countries to justify an average calculation, but Madagascar's figure of $5 equivalent (row 4) clearly reflects a low level of effort. The two countries are close to the SSA average for primary school enrollment, Tanzania being four points below, but both are well below the average for secondary school enrollment. Indeed in Tanzania's case one is tempted to describe the ratio of 5%, compared with Madagascar's 14% and SSA's 21%, as a scandal, given decades of rhetoric about self-reliance. Conversely, at 3% of GDP, Tanzania comes out significantly better on public health expenditure, while Madagascar is below the SSA average.

Table 1: Madagascar And Tanzania: Selected Parameters			
	Madagascar	**Tanzania**	**SubSaharan Africa excl. So. Africa**
1. Gov't deficit/surplus (including grants): % of GDP			
Average 1990-1997	-5.2	-1.3	-5.4
1997 (Madagascar) and 1998 (Tanzania*)	-2.4	-1.5*	-2.4
2. Inflation (12-month % change of CPI)			
Average 1990-1997	20.7	27.9	12.7
Oct. 1999**	12.0	7.0	n/a
3. Gov't revenue (excluding grants) - % of GDP			
Average 1990-1997	9.5	12.9	18.2
1997 (Madagascar) and 1998 (Tanzania*)	9.6	11.1*	18.1
4. Gov't education expend. (1987 US$ per cap.)	5	n/a	n/a
5. Gross enrollment ratios, 1993-95			
Primary school	72	67	71
Secondary school	14	5	21
6. Public health expend. (% of GDP), 1990-95	1.1	3	1.3

Source: World Bank, *African Development Indicators – 1998/99.*
* The 1998 data for Tanzania are taken from IMF (2000).
** 1999 inflation data from IMF (2000).

Choice of research theme: tax compliance. The identity yielding the budget deficit has two terms, resources and expenditure. Some discussion partners suggested researching the expenditure side, yielding proposals for improved controls and other measures to reduce low-priority expenditure. The topic ultimately proposed for research specifically omits the expenditure factor, while no claim is made that this is necessarily of lower priority than improving tax performance.

The tax systems of both countries had recently been studied by technical assistance missions from the International Monetary Fund (IMF), addressing multiple issues of tax policy and administration.[1] No one suggested that EAGER researchers should revisit these matters.

Instead the discussion focused on both governments' failure to collect a large share of the taxes legally due, and the implications of this for efficiency and equity. These implications arise from the fact that failure of one set of taxpayers to carry a fair share of the tax burden—assuming that the tax code distributes the burden more efficiently and fairly than *ex post* collections—forces a government to increase the deadweight loss (DWL) imposed on other taxpayers who are either more honest or more accessible to tax collectors.

[1] Abdel-Rahman et al., 1994, and Gandhi et al., 1995.

Tax declarations due span a wide range of degrees of voluntariness. At one extreme the government's paymaster-general deducts Pay-As-You-Earn tax liabilities, calculated by statute on the basis of civil servants' salaries, and transfers the proceeds to the treasury. Government employees have little room to try to evade these liabilities. At the other extreme, firms and households earn income from a multitude of sources that do not report the payments in question to the tax authorities, and earners are largely free to choose whether or not to declare the receipts. Countering the obvious incentive to maximize retention of income may be a fear of at least partial discovery and consequent pursuit by the tax service, a fear of disapproval by neighbors and family as the evasion grows more blatant, or even a feeling of moral responsibility to make some contribution to the costs of running the state.

In between the two extremes are certain payers of indirect taxes, notably legal importers and formal-sector producers of goods or services subject to VAT, excise or sales tax, at least part of whose transactions are reported and valued in documents readily available to the tax services. These operators can, and frequently do, strive to hide and/or undervalue a portion of their transactions.

Discussion partners in Madagascar and Tanzania noted that the local tax services are far from passive in accepting voluntary declarations from taxpayers. Where they perceive underreporting, they frequently seek to expose hidden transactions, correct undervaluation and assess taxpayers accordingly.

However, in both countries the author was struck by the fact that no discussion partner could locate a record of either government bringing a criminal prosecution against any firm or individual for tax evasion. Moreover, with the exception of occasional cases of smuggling across international borders, neither government had ever publicly identified major tax evaders, or publicized the results of any effort to estimate the total volume of tax evasion and elicit cooperation from the citizenry to reduce it, with consequent benefit to society.

Sub-theme: transparency in tax administration. In other words, observations by discussion partners in Madagascar and Tanzania suggested a tax evasion universe largely devoid of ***transparency***. In cases where the tax service perceives evasion, provided that the evader's political protection does not provide a shield, the service chooses whether to confront him or her. If the decision is positive, a confidential assessment is presented. The eventual result is determined by negotiations that involve one or more officials at a variety of levels and lead to outcomes ranging between zero and the full assessed payment. The opening for corruption is obvious.

It occurred to the author that Project EAGER, consistent with its mandate to devise policy prescriptions and suggest concrete measures of implementation, might make a strategic contribution to enhanced (and more balanced) tax compliance in three different ways, by:

1. spotlighting the concept of transparency and its potential relevance to policy,
2. proposing a systematic, periodic effort to measure evasion and its trend, and
3. recommending measures of increased transparency to motivate both taxpayers and the tax authorities to reduce evasion.

While occasional references to transparency and evasion, and point estimates of evasion, could be found in the existing literature on tax performance in Madagascar and Tanzania, it struck the author as *grosso modo* a neglected area of tax research in those countries. For example, the IMF's (then) most recent comprehensive survey of taxation in Madagascar (Abdel-Rahman et al., 1994) offered specific recommendations for increasing the tax services' coverage, and thus reducing evasion, but made no general estimate of evasion and did not refer to transparency.

The counterpart IMF report on Tanzania (Gandhi et al., 1995) contains a footnote estimating nonpayment of import taxes due at around 1.5% of GDP, and refers at several points to lack of transparency in the Investment Promotion Center's award of tax exemptions. But the treatment of transparency-related issues is very limited.

Accordingly, an EAGER research proposal focused on the foregoing points 1-3 was submitted to peer reviewers; stakeholders and USAID economists in the two countries; and USAID/Washington's Africa Bureau, and approved in early 1996.

B. Hypotheses regarding the utility of tax transparency

Key hypotheses outlined in the proposal or developed subsequently in the course of the study were the following:

- As tax evasion becomes an object of open discussion, involving debate in parliament, campaign speeches, resolutions by stakeholder groups, etc., pressure will build on major offenders to reduce the extent of their evasion, and on political leaders, from the head of state on down, not only to reduce their own evasion (since they frequently number among the largest offenders) but also to push the tax services into increasing collections--or at least to refrain from obstructing the services as and when they pursue prominent evaders.
- The greater the level of detail in publicly distributed reports on tax evasion, the closer the reports will come to identifying and embarrassing the largest evaders, as well as to pressuring the tax administration, both managers and their political overseers, to increase collections. For example, if a published report reveals that only ten companies or ten individuals declared 1997 taxable income in excess of million, paying X million in tax, serious economic journalists and other commentators can say, "Every observant individual in this country knows at least 25 companies/individuals whose profit/income, or expenditure therefrom, obviously exceeded sh.10 million," or, alternatively, "The income consistent with widely observed consumption expenditure by this country's ten greatest spenders should have generated ten times as much tax at established rates".
- In many African countries, a sizable share of tax delinquency is accounted for by state-owned enterprises (SOEs), and politically-directed lack of pursuit constitutes implicit government subsidization of them. Increasing the public light shed on this phenomenon may augment understanding of the true social cost of SOEs, and add support to moves to privatize or liquidate them.
- Publicly disseminating estimated evasion rates establishes a baseline against which the tax services' performance can be measured more precisely than is now the case, and permits the posting of quantitative targets for reducing evasion.
- Providing tax administrators and policy analysts with systematic estimates of tax evasion allows them to allocate collection and enforcement resources more efficiently, i.e. so as to

come closer to maximizing collection of delinquent taxes for a given investment of resources.

C. Objectives of the study

Since the Malagasy and Tanzanian tax services had never systematically prepared and disseminated estimates of tax evasion, the foregoing were not hypotheses of the study in the sense that the field research could aspire to test their validity. Rather, the study pursued a more limited set of objectives, namely, to show policy makers and stakeholders that:

- Evasion of many major taxes can be estimated systematically on the basis of economic parameters, allowing an aggregate estimate of the proportion of potential government revenue that is foregone through evasion;
- The margin of error of the estimation is narrow enough to (i) differentiate evasion rates among taxes, and (ii) identify rough trends for evasion of different taxes, i.e. to say whether evasion of a particular tax is going up or down over time;
- The taxpaying public is conscious of the phenomenon of evasion, and its acceptance of responsibility for helping to finance government expenditure is affected negatively by a perception that individuals and groups with political and/or financial influence engage in massive evasion of taxes to which they are liable; and
- Tax officials are likewise conscious of the phenomenon, and their perceptions of evasion rates are consistent with estimates based on economic analysis. Moreover their diligence in collecting taxes due is affected negatively by perceptions that (i) some of their peers and superiors accept bribes for collecting less than the full amounts due, and (ii) politicians use their influence to protect major evaders, including themselves.

D. Components of the study

The research commenced in 1996 with preparation of a survey paper[2] by Prof. Satish Wadhawan of Howard University. The paper presented the study's hypotheses, outlined a framework for the research, reviewed the theoretical and empirical literature on tax compliance, and examined the problem of measuring tax evasion in the specific contexts of Madagascar and Tanzania.

At the end of 1996, contracts were negotiated with teams of researchers in the two countries. The Malagasy team, headed by an economics professor at the University of Antananarivo, included a law professor, a senior retired tax official and a government economist. They were contracted by HIID, with the author as principal investigator (PI). The Tanzanian team, comprising three public finance economists in the University of Dar es Salaam economics department, was contracted by Howard University, with Prof. Wadhawan as co-principal investigator (co-PI).

Both teams discussed the study with officials in their countries' tax services, and enlisted their cooperation in obtaining (anonymous) data on returns for certain tax categories. A research

[2] At the request of USAID's Africa Bureau, survey papers were prepared at the same time for most of the studies thus far approved under the two streams of Project EAGER (the second stream being entitled Trade Regimes and Growth), and presented at an international workshop at Howard University, Washington, DC, in July 1996. The paper was revised by the present author and issued as an EAGER *African Economic Policy Discussion Paper* (Wadhawan & Gray, 1998), followed by a 4-page EAGER Policy Brief (Wadhawan & Gray, 1999).

supervision committee (RSC) was established for each study, consisting of representatives of the finance ministry, (separately) the tax service, the business community, and the university/research milieu.[3] In principle the RSC was to meet three times, once at an early stage to discuss the team's draft work plan, once at mid-term to review a progress report, and finally to discuss the team's draft final report. The Madagascar RSC met all three times, the Tanzania committee held the second and third of the programmed meetings.

Both teams invited comments on their draft reports from the author, and the Tanzania team submitted its draft to co-PI Wadhawan. The Madagascar team completed its report in March 1998, publishing it for local distribution two months later.[4] The Tanzania team issued its final report in March 1999.[5] In April 1998 the Madagascar team held a high-profile workshop, attended by some 60 persons from government, academe and the private sector and keynoted by the vice premier/minister of budget and decentralization, Pierrot Rajaonarivelo. By decision of the Tanzania RSC's chairman, the Tanzania team's report was presented and discussed at a two-day workshop in February 2001, devoted to reports on five different EAGER/PSGE studies concerning Tanzania.

The project has thus far yielded one other research paper, namely a study by the present author entitled "United States Practice in Estimating and Publicizing Tax Evasion"[6]. The object of this contribution was to show how one industrial country goes about estimating global tax evasion systematically, apprehending and punishing tax evaders, and publicizing this activity. It was hoped this would suggest to the EAGER researchers, more widely to officials and stakeholders in Madagascar, Tanzania, and indeed to EAGER's whole constituency, ways in which African governments might utilize enhanced transparency to improve tax compliance.

The present essay draws on the foregoing four papers—the 1996/98 survey paper, the two country team reports and the study on U.S. practice—as well as local responses to them and to accompanying efforts to disseminate proposals for enhanced transparency in tax administration. The paper is written as the EAGER Project draws to its close. Three years have passed since the major dissemination effort in Madagascar, and a number of events in that country have embodied clear responses. The dissemination effort in Tanzania has just commended.

Obviously it is too early to predict the long-run outcome of the study. Resistance to its proposals from vested interests may outweigh support indefinitely. Even among altruistic policy makers a consensus may develop that enhanced transparency consistent with the hypotheses of the study would bring minimal net social benefit. On the other hand some elements in society may see merit in the proposals and advocate them until at some future time the opposition is at least partially overcome.

This essay can thus offer no more than a few short-term observations about the reception accorded our transparency proposals in some quarters. It is our hope that the topic will be

[3] In the case of Madagascar two different HIID researchers participated as observers in two of the RSC meetings.
[4] Andrianomanana et al., 1998A.
[5] Osoro et al., 1999.
[6] Gray, 1999B.

revisited from time to time, tracing the status of transparency, whether in response to the 1995-2000 EAGER study or to future initiatives.

E. Estimating tax evasion

The two country teams devoted more than half their time to assessing the scale of tax evasion, always mindful, however, that the *process* of estimation described in their report was just as important as the figures they derived. In other words, a key object of the exercise was to show policy makers that evasion could be estimated systematically, and that this was something worth doing regularly in the future.

Madagascar. The Malagasy team utilized national accounts and trade data to estimate evasion of seven taxes; it obtained data from the customs service on revenue foregone due to customs exemptions; and field surveys that it conducted in Antananarivo and Mahajanga yielded a rough estimate of underdeclaration of real estate rentals.

The seven taxes and parameters used to estimate the theoretical tax base were:

- **A.** *Company profits tax*—for industrial firms: pre-tax profit according to a survey carried out by MADIO, a donor-funded affiliate of the government statistical service, INSTAT; for service enterprises: extrapolation of net surplus according to a ten-year-old INSTAT survey, net of (i) financial charges estimated from bank statistics, and (ii) an estimate of the informal sector.
- **B.** *Value added tax (domestic)*—application of a flat 15% rate to national accounts estimates of value added in the formal sector.
- **C.** *Sales tax*—turnover as estimated for industrial establishments in the MADIO survey, and services extrapolated from the 1984 INSTAT survey.
- **D.** *Nonwage income tax*—applies to enterprises not subject to company tax, mainly sole proprietorships. For industry: again, the MADIO survey; for services, a current national accounts estimate of turnover of sole proprietorships, converted to net value added by INSTAT's 1984 ratios of turnover and depreciation to value added, less financial charges as in A(i) above.
- **E.** *Value added tax (imports)*—c.i.f. value, plus customs duties, of imports excluding food, fuel, EPZ inputs and other goods granted temporary admission.
- **F.** *Other import taxes*—base same as (E).
- **G.** *Export taxes*—volume of vanilla exports, by law subject to a specific duty of $20/kg.

Table 2 gives the evasion rates estimated for the seven taxes, showing a weighted average of nearly 60%, equivalent to 8.8% of GDP. Since 1994 revenue from all taxes amounted to 8.3% of GDP, evasion exceeded revenue before taking into account evasion of taxes not included in the analysis, notably excises, taxes on wages & salaries and taxes on real property. On this basis, revenue due from all taxes exceeded 17% of GDP.

Table 3 shows customs exemptions as percentages of total revenue in 1995 and 1996 plus the exemptions, i.e. the denominator includes revenue that would have been due in the absence of the exemptions. In toto, 18% of revenue—actual collections plus exemptions—was forgone via exemptions.

Table 2 - Madagascar: Estimated Evasion of Selected Taxes, 1994

Tax*	Estimated evasion as % of tax due
A. Company profits tax	78.5
B. Value added tax (domestic)	37.1
C. Sales tax (part of the year)	71.8
D. Nonwage income tax	93.8
E. Value added tax (imports)	28.7
F. Other import taxes	29.2
G. Export taxes	84.9
Weighted average evasion rate, taxes A-G	**58.6****
	% of GDP
Estimated evasion of taxes A-G, ÷ GDP	8.8
Total collections of taxes A-G, ÷ GDP	6.2
Total collections of all taxes, ÷ GDP	8.3
Total collections of excluded taxes, ÷ GDP	2.1

Source: Andrianomanana et al. (1998A), pp. 34-35.
* For reasons of inaccessibility of data, excises (including fuel taxes) and taxes on wages & salaries and real property are excluded.
** Weights are total amounts of each tax estimated to be due.

Table 3 - Madagascar: Revenue Foregone by Customs Exemptions, 1995-96

Entitlement	% of hypothetical revenue (actual revenue + exemptions) foregone through exemptions*
Foreign aid	3.4%
Technical assistance	1.4%
Total exemption	0.7%
Partial exemption**	7.0%
Investment code	5.6%
Government imports	0.1%
Total	18.2%

Source: Andrianomanana et al. (1998A), p. 62.
* Equals exemptions granted in 1995 & 1996, divided by total revenue + exemptions. Values for 1996 are deflated by 20% CPI increase in that year.
** Accorded to imports "lacking commercial character".

In presenting this data the Malagasy team was not implying that all the exemptions represent *de facto* evasion. Exemptions are a prerequisite for nearly all project aid and technical assistance, although the budget may transform them into a corresponding charge against local agency appropriations. Investment code exemptions are designed to stimulate capital formation, production and employment. However, in Madagascar they were found to generate so much abuse that the code was abolished in late 1996. The entries labeled partial and total exemptions are likewise considered to have been subject to wholesale abuse.

In regard to taxation based on income from real estate, by a selective examination of municipal tax records and interviews with landlords and tenants, the team estimated roughly that landlords with rental property were understating rents by 40%.

Tanzania. Apart from citing earlier macro estimates of tax evasion and categorizing exemptions, this country team limited itself to developing partial indicators of evasion.

Of greatest interest are its indicators of evasion of import taxes. First, the team compared collections—duty, sales tax and excises levied on imports—with recorded imports during the fiscal years 1994/95 and 1995/96, arriving at an average ratio of 0.127. Comparing this with a weighted average total statutory tax rate of 20%, the team estimated nonpayment of taxes at 7.3% of import value, which corresponds to 7.5/20 = 37.5% of maximum revenue.[7]

Turning to exemptions as reported by Customs, the team found these to equal 58% of collections, which corresponds to 7.4% of recorded imports (= 0.58*0.127) during the two years. In other words, by this calculus, nonpayment of taxes appears to be almost fully accounted for by exemptions.

However, the team also compared Tanzania's imports as recorded by Customs with other countries' exports to Tanzania as reported in the IMF's *Direction of Trade*, and found a discrepancy averaging 38.7% (of the *DoT* figure) in 1994 and 1995. This reflects both smuggling and underinvoicing of legal imports.

Translating the figures into indices, *de facto* import tax collections represent 12.7/138.7 = 9.2%, and exemptions 7.4/138.7 = 5.3% of actual (*DoT*) import value, totaling 14.5% of actual imports. This leaves 5.5% of import value unaccounted for, equivalent to 2.1% of GDP. With the revenue/GDP ratio equivalent to 11.1% in 1998 according to IMF (2000), and 12.3% in 1997 according to Osoro et al. (1999)[8], this gives evasion of import taxes alone accounting for around 15% of hypothetical revenue (collections plus estimated import tax evasion). The calculations are presented in Table 4.

Taking the team's breakdown of import tax exemptions among categories of beneficiaries and taxes for the same fiscal years, Table 5 presents the data as percentages of hypothetical revenue, comprising actual collections plus exemptions (but excluding estimated evasion). As with its Madagascar counterpart, the Tanzania team had no basis for estimating the proportion of exemptions granted that bore no relation to social objectives, including those attributable to corruption. Nonetheless the team records the widespread view that several categories of exemptions generate large-scale abuse.[9]

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[7] Osoro et al., 1999, p. 29.
[8] Page vi.
[9] In 1997 the author called the team's attention to a *Government Gazette* notice exempting a certain individual from payment of duty on an imported vehicle. To general merriment the team identified the beneficiary as a national soccer star.

Turning to direct taxes, the Tanzania Revenue Authority (TRA) supplied the team with data comparing self-assessments in individual and company tax returns during 1993-95 with tax assessed by the then tax service after reviewing the returns.[10] The official assessments exceeded self-assessments by 34% for companies and 42.2% for individuals.

Table 4: Tanzania: Estimated Evasion of Import Taxes, 1994/95-1995/96
(all Tsh. and $ values are sums for two fiscal or calendar years)

				Ratio to (% of) imports		
	Item	**Tsh. Billion**	**$ million**	**…recorded by GoT Customs**	**…acc. to IMF *DoT***	**% of GDP**
A.	Import tax collections	212.5				
B.	Imports recorded by GoT Customs	1,673	3,046			
C.	Ratio of tax collected (= A/B)			0.127		
D.	Average statutory tax rate			0.200		
E.	Discrepancy (= D-C)			0.073		
F.	Exemptions	123.0				
G.	Ratio of exemptions (= F/B)			0.074		
H.	Imports according to IMF *DoT*		4,973			
I.	Discrepancy (= (H-B)/H)				0.387	
J.	Ratio of tax collected to *DoT* imports (= C/(1+I))				0.092	
K.	Ratio of exemptions to *DoT* imports (= G/(1+I))				0.053	
L.	Tax collected + exemptions (= J + K)				0.145	
M.	Estimated evasion as % of *DoT* imports (= D - L)				5.5%	
N.	GDP (sum of averages for 1994-95 & 1995-96)	6,054				
O.	Estimated evasion as % of GDP (= M(1+I)B/N)					2.1%

Source: Rows A, B, D, F & H from Osoro et al. (1999), pp. 29 & 34. GDP from IMF *IFS* (2000).

[10] The TRA was established with effect from 1st July 1996.

Table 5: Tanzania: Revenue Foregone by Import Tax Exemptions, 1994/96	
Beneficiary/tax category	**% of hypothetical revenue (actual revenue + exemptions) foregone through exemptions***
Category of beneficiary	
Government institutions	1.1%
Religious organizations	0.5%
Other non-gov't institutions	3.7%
Parastatals	2.1%
Investors approved by Investment Promotion Centre	2.8%
Other private companies, and individuals	3.4%
Total	13.6%
Category of tax	
Import duty	5.4%
Sales tax	8.0%
Excise tax	0.3%
Total	13.6%
Source: Total exemptions in the two fiscal years according to Osoro et al. (1999), p. 35, Citing Tanzania Revenue Authority. Total revenue from IMF (2000).	
* Equals exemptions granted in 1994/95 & 1995/96, divided by total revenue + exemptions.	

The procedure bears some resemblance to that applied by the U.S. Internal Revenue Service in the Taxpayer Compliance Measurement Program (TCMP) that it operated for over 30 years until 1995. The TCMP's scientific sampling of returns and nonpayers allowed the IRS to extrapolate the sample's estimated underassessment to the entire population of persons liable to income tax. *Ex ante* noncompliance was estimated at around 17%, subsequently reduced to 13% by collection measures.[11]

However the TRA gave no indication as to the proportion of returns reviewed, the procedure followed in selecting returns for review, or the extent to which tax officials might have exaggerated taxpayers' liabilities. Thus, the data furnished to the EAGER team would not support extrapolation to the taxpayer universe.

F. Perceptions of tax evasion

Several reasons can be adduced for taking perceptions of tax evasion seriously. Firstly, from the viewpoint of taxpayers, one may expect the extent of evasion to be correlated:

- (positively) with the prevalence of the attitude, "if X (a "large") share of the population is cheating, why should I pay to fill the fiscal gap?" and

[11] Gray, 1999B.

- (negatively) with the perceived cost of evasion, since the more taxpayers get away with cheating, the lower the likelihood and cost of apprehension and punishment.

Secondly, from the viewpoint of tax officials, evasion would likewise be correlated:
- (positively) with the prevalence of the attitude, "if my superiors are obviously tolerating large-scale evasion, (i) why should I incur the disutility of pursuing evaders, and (ii) why should I not benefit from the bribery that is evidently going on?" and
- (negatively) with the expected cost of corrupt behavior.

With these considerations in mind, the two EAGER teams conducted attitudinal surveys of taxpayers and tax officials. The Tanzania team applied random sampling to lists of five categories of taxpayers in Dar es Salaam, without estimating confidence intervals for the responses.[12] The Madagascar team's report does not claim to have used random sampling.

Some of the findings:

Madagascar. The EAGER team's survey of taxpayers located respondents at 230 places of employment. Highlights of the responses:
- Large trading enterprises run by Indo-Pakistanis are viewed as the biggest evaders. In second place ethnically come Malagasy citizens, followed by Chinese business people and, in fourth place, French.
- Company tax is perceived as the single most evaded tax, followed by VAT and personal income tax.
- Complicity of tax officials is seen as the biggest single factor in tax evasion, coming ahead of excessive tax rates, political intervention, and administrative weakness, respectively. Cited in this connection is a law authorizing defaulters to negotiate their penalty up to a ceiling of 4 times the evaded tax; the Treasury receives only 25%, the remainder being divided among officials involved in a case. Such arrangements are seen as epitomizing the system's lack of transparency.
- Aside from these negotiated settlements, prosecution of and sanctions against even flagrant defaulters are seen as "derisory".
- Government is considered to be indifferent to the contradiction between meager tax collections, often cited in the press, *versus* highly visible expansion of luxury housing as well as importation of new cars and other luxury goods.

The survey of tax officials identified *inter alia* the following views:
- The principal factor in tax evasion is seen to be deficient information and education of taxpayers, ahead of "taxpayer mentality" and inadequate service equipment (e.g. means of transport).
- The main practices of noncompliance are considered to be sales without bills or receipts, and underinvoicing, ahead of understatement of turnover and fraudulent deductions against VAT.

[12] No list was available for one of the categories, sole proprietors, while some operators calling themselves sole proprietors to avoid inclusion in TRA lists turned out to be limited companies.

- A majority of respondents accept as "partly justified" complaints of official incompetence, abuse of power and corruption, and the charge that the tax services fail to pursue the most flagrant evaders, leaving the unchanging few to fill government's coffers.

Tanzania. Taxpayer respondents in this country numbered 365. Highlights:

- In contrast to Madagascar, Tanzanian respondents describe sole proprietors, not large enterprises, as the biggest tax evaders. Medium enterprises come in between those two categories. An interesting fourth category cited is that of religious and charitable organizations.
- Similar to the Madagascar result, collusion and corruption are viewed as the chief factors underlying tax evasion. Following, in this order, are weak tax administration—notably failure of the tax service to follow up returns, excessively high rates, a plethora of taxes, and resentment at poor delivery of public services.
- Likewise following Madagascar, trading is seen as the activity most susceptible to tax evasion. Principal vehicles of evasion are seen as sales without receipts, non- or underdeclaration of rental income, nondeclaration of income by professionals, and smuggling, in that order.
- The Tanzania team invited taxpayers' views on ways to enhance system transparency. About 75% of respondents favored publishing names of tax evaders, and even more (84%) wanted publication of names of beneficiaries and amounts of tax exemptions, seen as a major leakage of revenue. Reasons cited by opponents of publication were interesting: that it would not help because of corruption, the motto should be "punish, not publish"! Irrespective of views on what should be done, many taxpayers doubted government's ability to publish, since officials numbered among the evaders.

The team distributed 20 questionnaires to officials, including five to senior TRA staff. In the event, only one of the five responded, while all 15 lower-level Treasury and TRA staff cooperated. Highlights were:

- Without supplying evidence, different TRA staff give three alternative estimates of evasion as a percentage of total revenue collected, namely 20%, 40% and 50%. From this range the EAGER team draws a weighted average of 36%, which it describes as consistent with earlier estimates (not its own) based on macroeconomic data. To be sure, a figure drawn in this way from staff "guestimates" is subject to a wide margin of error.
- The officials' ranking of taxpayer categories and economic sectors in order of propensity to evade taxes—sole proprietors in trading head the list—follows that of the taxpayer survey.
- The most evaded taxes are those on imports. This lends credence to the EAGER team's emphasis on smuggling and underinvoicing.
- Poor compliance is attributed to taxpayer dishonesty[13], deficient taxpayer education, ambiguous legislation, political interference, poor working conditions for staff, and inadequate skilled staff, in that order.

[13] The source uses the term "corruption", but the context makes clear that the officials are referring to unlawful behavior of taxpayers, not tax officials.

G. Enhancing transparency as a means to improve compliance

Each EAGER team report offers several recommendations for improving taxpayer compliance.[14] We highlight those related specifically to enhancing transparency:

- Both teams emphasize a need to increase the clarity of tax legislation and regulations, and devote more effort to taxpayer education. This would include regular publication of rulings of the tax authorities with potential applicability beyond individual cases.
- The Madagascar team calls for periodic updating of the analyses of evasion and tax exemptions summarized in Tables 2 and 3 above. This would form part of an annual report on Madagascar's public finances, to be prepared by an economic staff unit in the Ministry of Finance and the Economy independent of the tax services.[15] The report would be directed to both government staff and the public at large (the team calls for "internal" as well as "external" transparency).
- Both teams call for publication of:
    i. names of major defaulters, amounts involved, and sanctions applied;
    ii. similar information regarding tax officials dismissed or otherwise sanctioned for corrupt conduct; and
    iii. names of recipients of tax exemptions, authority under which these were granted and amounts involved.
- In order to increase the actual and perceived cost of tax evasion and related official corruption, the Tanzania team calls for applying and publicizing more severe penalties. Noting that dismissal has thus far been the heaviest punishment inflicted on tax officials apprehended for bribery, it calls for confiscating the assets they have acquired thereby.

On the issue of sanctions, it is noteworthy that not only policy makers in the two African countries, but also the researchers who authored these studies, have shied away from criminalizing even the most blatant forms of tax evasion and associated corruption. The present author's EAGER paper on U.S. practice in estimating and publicizing tax evasion cites IRS data showing that, in a recent year (1996), its Criminal Investigation Division (CID) referred 3,600 cases of tax fraud to the Department of Justice (DoJ) for prosecution. In the same year convictions were handed down on nearly 3,000 persons, with almost three-quarters of these being imprisoned.[16]

That paper's appendix reproduces sample press releases issued by U.S. district attorneys at various stages of such cases, as well as excerpts from the CID's *Publicity Guidelines.* The latter inform CID staff about the object of the publicity and procedures to be followed to maximize pay-off by way of impressing on taxpayers the likely cost of tax fraud.

The author distributed the paper among the researchers, as well as members of the respective Research Supervision Committees, hoping they might be inspired by the U.S. example to propose that tax fraud and corruption of a certain gravity be criminalized, and resulting sanctions publicized so as to enhance compliance. The exhortation has been greeted with silence on all sides. Clearly there is a consensus, shared even by many citizens who meet their tax liabilities,

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[14] See Andrianomanana et al. (1998A), pp. 75-76, and Osoro et al. (1999), pp. 72-80.
[15] The Secrétariat Permanent à la Prévision Macroeconomique, established in 1996.
[16] Gray (1998), pp. 8-9.

that putting people in jail for tax evasion is going too far. Let the government gather evidence against evaders, so the common view seems to run, and then sue them in civil proceedings, even, perhaps, penalizing the most blatant offenders by a multiple of their underpayment. But don't criminalize the matter.

H. Follow-up to the study: Madagascar

The dissemination workshop. This country's team circulated a near-final version of its report in early 1998, and, as already indicated, held an all-day dissemination workshop in Antananarivo in April 1998. In the days preceding the workshop, the press featured the EAGER report with articles carrying such titles as "TAX EVASION: 800 BILLION ANNUALLY",[17] and "FIGURE OF THE WEEK: 339 BILLION" (referring to customs exemptions).[18]

The workshop, whose proceedings were reported in the Antananarivo press, endorsed and elaborated on the team's proposals, while adding some recommendations described as "new" in the summary distributed subsequently to participants and relevant government agencies.[19] Highlights of these:

- Introduce the theme of "civisme fiscal" (acceptance of a civic duty to pay taxes) in the national education system.
- Calculate a threshold of tax tolerance for each taxpayer, taking into account in the tax ratio the burden of "parataxation", notably local taxes and taxes on water and electricity.
- Give the tax service the means to promote transparency, e.g. by allowing it to retain, for internal use, a percentage of taxes collected.
- Depoliticize the administration, *inter alia* by funding political parties in a transparent manner from the national budget.
- Define a "structure of information", with calendar, to follow up the workshop.

Information follow-up. On the last point (information), the team's energetic leader, Prof. Andrianomanana, prepared and published or circulated six documents:

1. A summary of the workshop proceedings;
2. A policy brief for the relevant ministers and public agencies;
3. A 2-page article in a local high-brow magazine;[20]
4. A 77-page final report, issued as a soft-cover monograph by a local publisher;[21]
5. A quarterly bulletin published by a local accounting/management consulting firm carried items (1) and (2) and a summary of (6) below;[22] and
6. A condensed version of the team report appeared as an article in the fall 1998 issue of the local economics journal.[23]

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[17] *Midi* (April 9, 1998). The figure of 800 billion refers to Malagasy francs, worth at the time about \$150 million, or 8.8% of 1994 GDP as shown in Table 2 above.
[18] *Midi* (April 11, 1998).
[19] Atelier EAGER… (1998)
[20] Andrianomanana (1998).
[21] Andrianomanana et al. (1998A).
[22] *Brief* (1998).
[23] Andrianomanana et al. (1998B).

Official follow-up #1: exposing defaulters and exemptions. Two months after the workshop, the Ministry of Budget and Decentralization released to the press lists of tax violators and recipients of exemptions, giving names and addresses. Table 6 summarizes the lists, which occupied the equivalent of five full pages in one of the local newspapers.[24]

Table 6 – Madagascar: Tax Violations and Exemptions Publicized by GoM, June 1998		
	Numbers of alleged:	
Alleged violations: category/status	**..violators**	**..violations**
A. Formal complaints of tax evasion (not including (B))*	113	191
B. Formal complaints of tax arrears by rum bottlers	7	7
C. Taxpayers** disqualified from exemption from PSI***	131	n.a.
Taxpayers in noncompliance with Customs: D. …fictitious bonded warehouses	12	n.a.
E. …referred to Courts	13	13
F. …unrecorded imports	80	96
G. …EPZ status, in noncompliance or undergoing Customs investigation	37	n.a.
H. Taxpayers in arrears *vis-à-vis* indirect taxes	26	38
	Numbers of:	
Exemptions	**..firms**	**..exemptions**
Taxpayers exempted from taxes and duties	35	50

Source: *L'Express*, June 18-19, 1998. Tabulations by the author. In accordance with apparent logic, order of categories here differs slightly from that in source.

* Two categories with virtually the same title—"infraction sur…", followed by singular and plural, respectively, of "procés verbal"—have been combined here.

** Source uses the term "personnes physiques ou morales", i.e. "individuals or enterprises".

*** Pre-shipment inspection. Refers to importers whom Customs has found abusing an exemption from PSI by making false declarations.

Considering that the EAGER workshop was keynoted by the responsible minister (vice-premier Rajaonarivelo) and attended by many staff from his tax services, a connection between the workshop's recommendations and release of the lists seems quite possible. However, no formal credit was given to the workshop or the study, and no senior official is reported to have acknowledged it orally.

A week after the release, on June 24, the minister rescinded all discretionary exemptions from import taxes, i.e. exemptions other than those specified by law.[25] The announcement did not list the exemptions still outstanding as of that date, nor did the ministry release information on the value of discretionary and other exemptions accorded up to that time.

In early July the private sector, in the person of the Groupement des Entreprises Malgaches (GEM), the main employer federation, together with a smaller grouping of Malagasy-run firms, responded publicly to what the press was already calling the "famous Rajaonarivelo lists". Entitled "On Government's Attitude Regarding Tax Transparency"[26], the GEM/FIVMPAMA communiqué said publication of the lists was "in principle, positive", but, accusing the tax

[24] *L'Express* (June 18-19, 1998).
[25] *L'Express* (June 25, 1998).
[26] Ibid (July 9, 1998).

services of “at best incompetence, at worse, bad faith”, went on to describe the manner of release as an “indiscriminate act bordering on public defamation”. Specific complaints included:

- The lists mixed “good” taxpayers with “bad” ones, some figuring in both categories;
- A number of taxpayers had received no notice of formal complaints until they asked why they appeared in the lists;
- A number of notorious tax evaders and “corrupters” were omitted;
- Government arrears *vis-à-vis* suppliers denied many the means to pay their taxes on time;
- “The extra-legal, even unconstitutional granting of tax exemptions of all kinds” was the main cause of Madagascar’s low tax rate and weak revenues, meanwhile “undermining competition and strangling the few Malagasy industries.”

The communiqué demanded publication of new, “exact” and “exhaustive” lists of (i) defaulters, (ii) exemptions granted in the last 18 months, and (iii) government creditors. It also demanded that future exemptions be restricted to those authorized by law, with recipients being identified in the government gazette.

The existence of political feedback from the “Rajaonarivelo lists” is suggested by an Economic Intelligence Unit reference to the lists having drawn “unwanted public attention” to three MPs, two of them from the vice-premier’s own (ruling) party, who were named as tax defaulters.[27]

A few months later, tax transparency returned to public attention when the local economic journal, *Economie de Madagascar*, featured six articles on tax questions, and its editors sponsored a high-profile symposium on taxation.[28] Once again, vice-premier Rajaonarivelo keynoted the event. He cited Madagascar’s low tax rate, while noting a substantial improvement since 1994—from 7.7% of GDP in that year to a budgeted 11.4% in 1999.[29] He added that only around 400,000 taxpayers were financing the country, as against two million who should be contributing. (Another prominent participant added the qualification, after the vice-premier’s departure, that the latter was referring only to direct taxes, ignoring the far larger share of the population that pays indirect taxes.)

Enhanced transparency in tax administration was one of nine major areas of reform promised in the vice-premier’s statement; suppression of tax exemptions was another. (Cf. the press’ comment on the latter: “Everyone knows that, even after exemptions were already prohibited, they were being granted just the same.”)

Enhanced transparency as a prerequisite for restoring “civisme fiscal” was one of three major conclusions of the symposium.[30] Emphasis was placed on transparency both in executing laws concerning tax exemptions, and in reporting outcomes—receipts, collection rates and tax

[27] EIU (1998), no page nos.

[28] *Economie de Madagascar* (1998). Two of the articles were summaries of reports by Malagasy teams (in one case including a U.S. researcher) prepared under the EAGER project, Andrianomanana et al. (1998B) and Andrianomanana et al. (1998C). The symposium took place in January 1999.

[29] *Tribune* (1999).

[30] *L’Express* (1999). The others were (i) the need to collect a larger share of the taxes due under existing laws, by improved tax administration, rather than to increase rates or introduce new taxes, and (ii) the need for a tax policy tailored to the country’s objectives for growth and equity, developed in consultation with civil society.

evasion. The group called for “a systematic policy of communication and information about objectives and performance” of the tax system.

Official follow-up #2: reporting tax performance. As of the date of preparation of this paper, in early 2001, the Malagasy authorities have taken no steps to implement this last-named recommendation or the related proposal emanating from the 1998 EAGER report, seconded by the April 1998 workshop. The economic analysis unit (SPPM) in the finance ministry to which the EAGER report recommended assigning periodic reporting on tax performance, continues its essential tasks of preparing the macroeconomic basis for budget estimates and monitoring the progress of structural adjustment in conjunction with IMF and World Bank missions. But if it (or any other GoM agency) attempts to estimate tax evasion and follow trends in collection rates, no such findings have yet been released publicly.

In conjunction with the local research team, following the 1998 workshop the author met with senior Malagasy finance officials to propose a concrete approach to collecting and publicizing tax performance data. Taking into account that few government agencies can afford to hire good local economists, while those that can, assign first priority to the tasks cited above, we suggested seeking donor support to subcontract with local academic or private economists to draft reports on tax performance. While no donor representatives had committed themselves to such support, it seemed likely that the modest resources required to launch this work could be found from among the numerous foreign agencies that were continually exhorting the GoM to improve its tax administration.

In the event, every GoM official to whom this proposal was presented politely diverted the discussion to an unrelated area in which he or she felt that technical assistance might be useful. No one said explicitly that the topic of tax performance was not worthwhile pursuing, or even potentially counterproductive, but the proposal clearly made our official discussion partners uncomfortable.

At this stage we can only speculate on reasons for this resistance and prospects for ultimately overcoming it. Malagasy finance and tax officials often refer to tax performance as an area rife with political interference, and they may consider that serious analysis of evasion could get them into hot water with their superiors, right up to the nation’s president. It is also not hard to imagine the particular research modality suggested, subcontracts with academic and private economists, making officials uncomfortable. Few low-income countries, and certainly not Madagascar, are accustomed to the western practice of revolving doors between government and academe.

Moreover, all bureaucracies are understandably nervous about exercises that result in setting concrete targets by which their performance can be measured. One of the hypotheses stated in Section B above is that systematic analysis of tax evasion could lead to targets for the tax services to improve their rates of collection. The likely reluctance of the services to take this burden on themselves this was one factor behind the EAGER team’s suggestion that the work be entrusted to the SPPM as a separate economic staff unit.

Political discomfort with the thought of overtly confronting tax evasion is not confined to low-income countries or Madagascar. After 30 years the U.S. Internal Revenue Service finally had to suspend its Taxpayer Compliance Measurement Program in 1995 for reasons described by another government agency as (i) "budget concerns" (read: unwillingness of Congress to continue funding the TCMP) and (ii) pressure exerted by Congress, taxpayer groups, paid preparers and others due to "its cost to and burden on taxpayers."[31]

What might be done to overcome GoM reluctance to track tax evasion publicly? Certainly one hopes that local stakeholders such as GEM, FIVMPAMA, the editorial board of *Economie de Madagascar*, and the participants in the journal's 1999 symposium will continue to pressure the government in this direction. In addition, we see a role for multilateral agencies such as the IMF, one of whose main themes is improving tax administration. In this vein the Fund has made a sizable investment in developing the Malagasy tax service's Center for Large Enterprises,[32] but no publicly available Fund document calls on the GoM to conduct the type of open reporting proposed here.

For its part the World Bank has made a grant to Madagascar "to strengthen tax administration and to elaborate, analyze and implement tax policy."[33] The government has requested proposals from international and local consultants, including economists, to provide technical assistance. It is to be hoped that the project will serve as a vehicle for promoting some of the recommendations of and following the EAGER study.

I. Follow-up to the study: Tanzania

The Tanzania team's March 1999 report was discussed at the second RSC meeting in April 1999, with TRA's commissioner for indirect taxes in attendance. It received no further distribution until February 2001, when it was circulated to invitees to an EAGER dissemination workshop convened by the RSC chairman, a former UDSM economics professor and TRA board member who is currently director of the think tank Research on Poverty Alleviation (REPOA). As indicated earlier, this workshop, which both Prof. Wadhawan and the present author attended, discussed papers emanating from five different EAGER studies.

Among participants in the workshop were the TRA's board chairman, who is also economic advisor to the prime minister, and a staff member of the TRA research department. Comments on the Tax Transparency report by these two strategically placed officials provided indicators as to the report's consistency with TRA's ongoing reform program.

It was reported that the TRA is currently benefiting from a multi-donor Tax Administration Project (TAP) valued at $70 million, with participation *inter alia* by the World Bank, British and Danish aid, and USAID. The project finances both equipment and training. A "Large Taxpayers Unit" has been established. With assistance from Danish aid, taxpayers have been warned to

[31] GAO (1996).
[32] During 1997-98 the IMF seconded a French tax expert to this unit. The expert was withdrawn before the end of his term when he and the Fund's Fiscal Affairs Department concluded that the government was withholding the political support necessary for the unit to fulfill its mandate. Source: personal interviews, 1998.
[33] *The Economist* (2001), comprising a solicitation by the Government of Madagascar.

register for Personal/Taxpayer Identification Numbers (PIN/TINs). From mid-2001 USAID will supply a resident adviser from the Internal Revenue Service.

As regards discretionary (i.e. nonstatutory) exemptions, under the TRA Act the finance minister can only grant these after consulting the TRA board. It was reported that only one such exemption had been granted since 1997, allowing the state-owned power company to import a gas turbine free of duty. A special anti-corruption inspectorate has been established. Arising from its efforts, 23 TRA staff were dismissed during February 2001.

A tax appeals tribunal was scheduled to begin operation on April 1, 2001. TRA has instituted a single bill of entry procedure to accelerate clearance of imports. Pre-shipment inspection of imports (PSI) is now subject to audit.

No plans have been made to estimate tax evasion systematically, but the TRA chairman expressed interest in this proposal emanating from the study. On the other hand no plans are underway to publicize cases of flagrant tax evasion or stiffen penalties for tax evasion (much less criminalize evasion) as recommended in the EAGER study.

A shorter version of the Tanzania team's report, incorporating new information on TRA's reform program and comments made at the February 2001 workshop, is scheduled for publication in the EAGER *African Economic Policy Discussion Paper* series hosting the present paper. It is to be hoped that circulation of the report, of manageable length and in the attractive *AEPDP* format, within TRA as well as the academic and business communities in Dar es Salaam, will contribute to discussion of transparency issues and perhaps give an extra fillip to TRA's commendable efforts. At this stage it is premature to claim concrete impact for the study.

J. Concluding remarks

The EAGER studies in the two countries raised issues that were far from being in the forefront of debate about tax issues in Madagascar or Tanzania (or for that matter in any other African country). The research done by the two national teams confirmed that, while many stakeholders acknowledge tax evasion as a significant factor in macroeconomic fragility and deficient funding of social services, the responsible officials are highly reticent about estimating and publicizing its magnitude and exposing its severest perpetrators.

It is useful to recall here, summarizing section B, the key hypotheses that motivated the research:

- As tax evasion becomes an object of open discussion, involving debate in parliament, campaign speeches, resolutions by stakeholder groups, etc., pressure will build on major offenders to reduce the extent of their evasion, and on political leaders, from the head of state on down, not only to reduce their own evasion but also to push the tax services into increasing collections--or at least to refrain from obstructing the services as and when they pursue prominent evaders.
- The greater the level of detail in publicly distributed reports on tax evasion, the closer the reports will come to identifying and embarrassing the largest evaders, as well as to pressuring the tax administration, both managers and their political overseers, to increase collections.

- Publicly disseminating estimated evasion rates establishes a baseline against which the tax services' performance can be measured more precisely than is now the case, and permits the posting of quantitative targets for reducing evasion.
- Providing tax administrators and policy analysts with systematic estimates of tax evasion allows them to allocate collection and enforcement resources more efficiently, i.e. so as to come closer to maximizing collection of delinquent taxes for a given investment of resources.

Similarly, it was noted in section C that, since tax evasion has rarely been subject to systematic estimation and official publicity, the study could not presume to test any of these hypotheses on the basis of historical evidence. Instead, it pursued a more limited agenda designed to show policy makers and stakeholders that:

1. Evasion of many major taxes can be estimated systematically on the basis of economic parameters, allowing an aggregate estimate of the proportion of potential government revenue that is foregone through evasion;
2. The margin of error of the estimation is narrow enough to (i) differentiate evasion rates among taxes, and (ii) identify rough trends for evasion of different taxes, i.e. to say whether evasion of a particular tax is going up or down over time;
3. The taxpaying public is conscious of the phenomenon of evasion, and its acceptance of responsibility for helping to finance government expenditure is affected negatively by a perception that individuals and groups with political and/or financial influence engage in massive evasion of taxes to which they are liable; and
4. Tax officials are likewise conscious of the phenomenon, and their perceptions of evasion rates are consistent with estimates based on economic analysis. Moreover, their diligence in collecting taxes due is affected negatively by perceptions that (i) some of their peers and superiors accept bribes for collecting less than the full amounts due, and (ii) politicians use their influence to protect major evaders, including themselves.

The contention of this paper is that the country teams in Madagascar and Tanzania succeeded in establishing theses 1 and 2 through their estimates of evasion, and theses 3 and 4 through the surveys they conducted among stakeholders, both taxpayers and tax officials. By thus lending credibility to the underlying hypotheses, the teams' conclusions support the call to the tax authorities in the subject countries, and by extension elsewhere in Africa, to treat transparency in its various dimensions as a tool for improving compliance. This in turn will enhance the role of African tax systems in supporting macroeconomic stability and extending provision of public services.

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